

Entry
Approved LMA
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IN THE CLAIMS:

1. (cancelled)
2. (cancelled)
3. (cancelled)
4. (previously presented) A method of operating a magnetic resonance imaging system having a first coil and a second coil to achieve an imaging volume, said method comprising:

in a first mode, achieving the imaging volume by using a sum field from both of the coils; and

in a second mode, achieving the imaging volume by using a difference field from both of the coil,

wherein P1 and S1 are primary and shield radii for the first coil, P2 and S2 are primary and shield radii for the second coil, and $P1 < P2 < S1 < S2$, said method comprising achieving the current density for a small imaging volume coil by assuming that the primary and shield radii are P2 and S1 respectively and denoting the current density by D1.

5. (original) A method in accordance with Claim 4 further comprising achieving the current density for a large imaging volume coil by assuming that the primary and shield radii are P2 and S2 respectively and denoting the current density by D2.

6. (original) A method in accordance with Claim 5 further comprising denoting the initial current density for coil C1 by $E1 = 0.5 * (D1 + D2)$.

7. (original) A method in accordance with Claim 5 further comprising denoting the initial current density for coil C2 by $E2 = 0.5 * (D1 - D2)$.

8. (cancelled)